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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/171,583	11/24/1998	WILLIAM JOHN BAILLIE-HAMILTON	ROCKCOP39AUS	8228

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EXAMINER	
NEILS, PEGGY A	
ART UNIT	PAPER NUMBER
2875	

DATE MAILED: 04/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/171,583	BAILLIE-HAMILTON, WILLIAM JOHN	
	Examiner	Art Unit	
	P ggy A. Neils	2875	

-- The MAILING DATE of this communication appears on the cov r sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *73-89* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *73-89* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Applicant has stated that Verderber does not disclose that the optical coupling of lamp 40 with rod 32 is a significant matter and does not seek to provide for controlled location of the light generating source in the lamp relative to the rod. It is not clear what claim language would read of "significant matter", however, all the structural limitations of the claim are met by the reference. Claim 73 sets forth a containment for housing an element for emitting light, this is met by tubular member 30 identified as a heat sink, next is claimed a light conducting element which is required to be coaxial with the light emitting element and which is also required to have a transverse width similar to the width of the containment. As shown in Figure 2 of Verderber, rod 32 is coaxial with lamp 40, i.e. both extend along the same axis. In column 3, line 35, it is stated that the rod is firmly held within the heatsink by means of an adhesive or an interference fit. Applicant states that the lamp of Verderber is positioned in a part of the heat sink that has a larger diameter than that of the heat sink which surrounds the light rod 32 and that because of this leakage paths for light from the lamp exist which further reduce the efficiency of transmission of light into the light rod. Whether the system is efficient or not is arguably. However, the light source is positioned within a closed housing, i.e. the heat sink and it is stated in column 3, line 64, that the lamp is positioned in close approximation to rod 32 and contains a lens 41 for focusing light into the end of the rod. Applicant is reading more into the claim than is there. The outside of the lamp is not required to be identical to the diameter of the rod. It is not clear what Applicant thinks is meant by the limitation "optical coupling." Verderber shows and discloses that the light source emits light into the end of the rod, that is an "optical coupling." On page 8 of

Response to Amendment

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 73-76, 79, and 80 are rejected under 35 U.S.C. 102(b) as being anticipated by Verderber.

Verderber shows a light outputting device which includes a containment 30 for housing a light emitting element 41, a light conducting element 32 made from quartz glass, and a refractor 41 positioned between the light emitting element and the light conducting element. See Figure 2. The embodiment shown in Figure 5 shows a reflective surface 50 on the housing surrounding the light emitting element. Lamp 40 is a high intensity lamp.

Response to Arguments

3. Applicant's arguments filed January 18, 2002 have been fully considered but they are not persuasive.

Applicant's arguments, Applicant states that the light conducting rod and containment cannot have a similar width because a larger area is shown where the light source is located. As set forth above, the light conducting element can have an interference fit in Verderber which certainly reads on the broad term of "similar." The claim doesn't state that the housing for the light emitting element has any kind of width in regard to the placement of the light rod. In fact, Applicant's claim doesn't even set forth that the rod in "within" the containment. The claims requires that the containment and rod are coaxial and of a similar width. This is met by Verderber.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 77, 82-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verderber.

Verderber does not go into detail about the space encompassing the light emitting element other than to state that it is sealed by a compound 42. However, the prior art discussion in column 1 beginning at line 28 discusses the problems with high intensity lamps and vacuum lamps. It obviously contemplated that the invention is directed toward solving the problem of excessive heat build-up caused by these types of lamp. Therefore, it is obvious that the Verderber patent

would include a light contained in an envelope which defines a plenum whereby a vacuum or inert gas exists. Also in the absence of any unobvious or unexpected results to have the housing/containment/sleeve be longer than the light conducting member is a matter of design choice depending on the intended use for the device.

6. Applicant's arguments filed January 18, 2002 have been fully considered but they are not persuasive.

Applicant states that there is no disclosure with respect to the limitation in Claim 84 of ". . . .a first end of the plenum defined by a light receiving surface of the light wave conducting portion, . . ." As set forth above, the disclosure regarding high intensity lamps discusses the area housing the light source which would define a plenum wherein a vacuum or inert gas would exist. As in the invention, the containment portion of Verderber would define a plenum as set forth in column 1 in the discussion of the prior art.

7. Claims 78 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verderber in view of Ghandehari.

Ghandehari teaches that it is known in the art to vary the color of a light output device. It would be obvious to one skilled in the art that Verderber could be modified to include a filter device in the same manner as taught by Ghandehari because both references are directed to transmitting light by a light conducting member.

In response to Applicants arguments of why the teaching of Ghandehari would be combined with Verderber, the Ghandehari reference teaches transmitting light through a conductor while

dissipating excess heat. Both references are of analogous art and properly combinable. Both teach using a conductor transmit light.

8. Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over Verderber in view of Cecil, Jr..

Cecil, Jr teaches that it is known in the art to use a glass containment 32 for a light emitting element positioned adjacent to a light conducting element. It would have been obvious to one skilled in the art that Verderber could be modified to have the containment housing made from glass in the same manner as taught by Cecil, Jr. because both references are directed to similar light transmitting devices.

Applicant's comments have been considered but are not persuasive. Applicant states that Claim 81 is a method claim as was former Claim 61 which is replaced by Claim 81. This is incorrect. Both canceled Claim 61 and new Claim 81 are apparatus claims. It is maintained that Cecil, Jr. is properly combinable with Verderber. Both references are directed to transmitting light through an optical conductor.

Drawings

9. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on January 18, 2002 have been approved.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any questions regarding this Office action should be directed to Examiner Neils at (703) 308-6554.

Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800